

CLAIMS

1. A computer system comprising a computer main body having a hard disk drive to retrieve/store data and a hard disk drive driving part to drive the hard disk drive to rotate at a predetermined rotational speed, the computer system further comprising:

a lower noise mode selection part to allow a user to select either a normal mode or a lower noise mode; and

a controller to control the hard disk drive driving part to drive the hard disk drive to rotate at a maximum speed when the normal mode is selected and at a minimum speed when the lower noise mode is selected.

2. The computer system according to claim 1, wherein when the lower noise mode is selected, the controller controls the hard disk drive to rotate at a data processing speed, which is faster than the minimum speed and slower than the maximum speed, on the basis of an external data processing signal.

3. The computer system according to claim 2, wherein the hard disk drive includes location information on data and uses the location information regardless of the maximum speed and the data processing speed.

4. The computer system according to claim 3, wherein the location information includes a file allocation table.

5. The computer system according to claim 1, wherein the lower noise mode selection part is implemented by a predetermined application program or a hot key.

6. The computer system according to claim 2, wherein the lower noise mode selection part is implemented by a predetermined application program or a hot key.

7. The computer system according to claim 3, wherein the lower noise mode selection part is implemented by a predetermined application program or a hot key.

8. The computer system according to claim 4, wherein the lower noise mode selection part is implemented by a predetermined application program or a hot key.

9. A method of controlling a computer system comprising a computer main body having a hard disk drive to retrieve/store data and a hard disk drive driving part to drive the hard disk drive to rotate at a predetermined rotational speed, the method comprising:

selecting either a normal mode or a lower noise mode; and

controlling the hard disk drive driving part to drive the hard disk drive to rotate at a maximum speed when the normal mode is selected and at a minimum speed when the lower noise mode is selected.

10. The method according to claim 9, further comprising controlling the hard disk drive to rotate at a data processing speed, which is faster than the minimum speed and slower than the maximum speed, on the basis of an external data processing signal when the lower noise mode is selected.

11. A method for controlling a noise level of a hard disk drive, comprising:
selecting between a lower noise mode and a normal noise mode;
decreasing the rotational speed of the hard disk drive to a minimum rotational speed if the lower noise mode is selected; and
maintaining the rotational speed of the hard disk drive at a maximum rotational speed if the normal noise mode is selected.

12. The method according to claim 11, further comprising increasing the rotational speed of the hard disk drive from the minimum rotational speed to a data processing rotational speed if the lower noise mode is selected and a data process signal is inputted into the hard disk drive.

13. The method according to claim 12, further comprising decreasing the rotational speed of the hard disk drive from the data processing rotational speed to the minimum rotational speed when the data process is completed.

14. The method according to claim 11, further comprising increasing the rotational speed of the hard disk drive to the maximum rotational speed when the lower noise mode selection is released.

15. The method according to claim 12, wherein the data processing rotational speed of the hard disk drive is approximately 3,600 RPM.

16. The method according to claim 11, wherein the minimum rotational speed of the hard disk drive is less than the data processing rotational speed of the hard disk drive.

17. The method according to claim 11, wherein the maximum rotational speed of the hard disk drive is at least 7,200 RPM.

18. The method according to claim 11, wherein the lower noise mode selection and the normal noise mode selection are implemented by a predetermined application program or a hot key.

19. An apparatus to control a noise level of a hard disk drive, comprising:
a noise mode selection device to allow a user to switch between a lower noise mode and a normal noise mode; and
a control device to control the hard disk drive to rotate at a minimum rotational speed if the lower noise mode is selected, a maximum rotational speed if the lower noise mode is not selected, and a data processing rotational speed if a data processing signal is inputted into the control device and the lower noise mode is selected.

20. The apparatus according to claim 19, wherein the control device controls the hard disk drive to increase the rotational speed of the hard disk drive from the minimum rotational speed to the data processing rotational speed when the data process signal is inputted into the control device and the lower noise mode is selected in order to reduce a noise level of the hard disk drive and to decrease a time duration required to prepare for the data process.

21. The apparatus according to claim 20, wherein the control device controls the hard disk drive to decrease the rotational speed of the hard disk drive to the minimum rotational speed when the data process is completed in order to decrease the noise level of the hard disk drive.

22. The apparatus according to claim 19, wherein the hard disk drive contains a single file allocation table to store information on where a directory or a file is located regardless of the rotational speed of the hard disk drive in order to reduce the delay of the data process.

23. The apparatus according to claim 22, wherein the file allocation table contains information relating to the maximum rotational speed of the hard disk drive.

24. The apparatus according to claim 19, wherein the data processing rotational speed of the hard disk drive is approximately 3,600 RPM.

25. The apparatus according to claim 24, wherein the minimum rotational speed of the hard disk drive is less than the data processing rotational speed of the hard disk drive.

26. The apparatus according to claim 19, wherein the maximum rotational speed of the hard disk drive is at least 7,200 RPM.

27. The apparatus according to claim 19, wherein the lower noise mode selection and the normal noise mode selection are implemented by a predetermined application program or a hot key.